

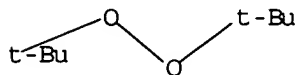
08/567,564

(FILE 'HOME' ENTERED AT 11:27:28 ON 28 FEB 2005)

FILE 'REGISTRY' ENTERED AT 11:27:45 ON 28 FEB 2005

L1 STRUCTURE UPLOADED

=> d l1  
L1 HAS NO ANSWERS  
L1 STR



Structure attributes must be viewed using STN Express query preparation.

=> s l1  
SAMPLE SEARCH INITIATED 11:29:57 FILE 'REGISTRY'  
SAMPLE SCREEN SEARCH COMPLETED - 192 TO ITERATE

100.0% PROCESSED 192 ITERATIONS 0 ANSWERS  
SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE \*\*COMPLETE\*\*  
BATCH \*\*COMPLETE\*\*  
PROJECTED ITERATIONS: 3009 TO 4671  
PROJECTED ANSWERS: 0 TO 0

L2 0 SEA SSS SAM L1

=> s l1 full  
FULL SEARCH INITIATED 11:30:03 FILE 'REGISTRY'  
FULL SCREEN SEARCH COMPLETED - 3631 TO ITERATE

100.0% PROCESSED 3631 ITERATIONS 14 ANSWERS  
SEARCH TIME: 00.00.01

L3 14 SEA SSS FUL L1

=> fil caplus  
COST IN U.S. DOLLARS SINCE FILE TOTAL  
ENTRY SESSION  
FULL ESTIMATED COST 162.62 162.83

FILE 'CAPLUS' ENTERED AT 11:30:08 ON 28 FEB 2005  
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FILE COVERS 1907 - 28 Feb 2005 VOL 142 ISS 10  
FILE LAST UPDATED: 27 Feb 2005 (20050227/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> s 13

L4 3747 L3

=> s 13/prep

3747 L3

3268091 PREP/RL

L5 80 L3/PREP

(L3 (L) PREP/RL)

=> s 15 and "t-butyl alcohol"

753674 "T"

245730 "BUTYL"

221252 "ALCOHOL"

61 "T-BUTYL ALCOHOL"

("T" (W) "BUTYL" (W) "ALCOHOL")

L6 0 L5 AND "T-BUTYL ALCOHOL"

=> s 15 and "tert-butyl alcohol"

240925 "TERT"

245730 "BUTYL"

221252 "ALCOHOL"

5020 "TERT-BUTYL ALCOHOL"

("TERT" (W) "BUTYL" (W) "ALCOHOL")

L7 15 L5 AND "TERT-BUTYL ALCOHOL"

=> d 1-15 bib abs

L7 ANSWER 1 OF 15 CAPLUS COPYRIGHT 2005 ACS on STN

AN 2004:271497 CAPLUS

DN 140:287101

TI Preparation of dialkyl peroxides from alcohols and hydroperoxides

IN Kayaba, Daisuke; Watanabe, Takashige; Nakamura, Tomoyuki

PA NOF Corporation, Japan

SO Jpn. Kokai Tokkyo Koho, 9 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2004099491	A2	20040402	JP 2002-262021	20020906
PRAI	JP 2002-262021		20020906		

OS CASREACT 140:287101

AB Dialkyl peroxides are prepared by continuously feeding solns. containing alcs. and organic hydroperoxides or H<sub>2</sub>O<sub>2</sub> into tube reactors filled with zeolitic solid acid catalysts. A solution containing tert-BuOH and Perbutyl H 69 was fed to a reactor filled with  $\beta$ -zeolite catalyst (SiO<sub>2</sub>/Al<sub>2</sub>O<sub>3</sub> 100) at 75° to give 90.1% di-tert-Bu peroxide. The catalyst activity was retained over  $\geq$ 240 h.

L7 ANSWER 2 OF 15 CAPLUS COPYRIGHT 2005 ACS on STN

AN 2004:218752 CAPLUS

DN 140:254052

TI Process for manufacturing dialkyl peroxide

IN Ichikawa, Shuji; Nakamura, Tomoyuki

PA Nof Corporation, Japan

SO Jpn. Kokai Tokkyo Koho, 9 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2004083535	A2	20040318	JP 2002-250105	20020829
PRAI	JP 2002-250105		20020829		

AB The title process comprises reacting an alc. with an organic hydroperoxide in the presence of a  $\beta$ -form zeolite solid acid catalyst and a Bronsted

acid (e.g., sulfuric acid, etc.). Di-tert-Bu peroxide was prepared in 83.6% yield by the title process.

L7 ANSWER 3 OF 15 CAPLUS COPYRIGHT 2005 ACS on STN

AN 2003:282530 CAPLUS

DN 138:305790

TI Process for producing dialkyl peroxides with high yield using zeolite solid acid catalysts

IN Ichikawa, Shuji; Kayaba, Daisuke; Nakamura, Tomoyuki; Watanabe, Yasumasa; Matsuyama, Kazuo; Namba, Seitaro

PA NOF Corporation, Japan

SO PCT Int. Appl., 34 pp.

CODEN: PIXXD2

DT Patent

LA Japanese

FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2003029207	A1	20030410	WO 2002-JP9944	20020926
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
	RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
	JP 2003104966	A2	20030409	JP 2001-298998	20010928
	JP 2003286252	A2	20031010	JP 2002-89743	20020327
	JP 2003286253	A2	20031010	JP 2002-92289	20020328
PRAI	JP 2001-298998	A	20010928		
	JP 2002-89743	A	20020327		
	JP 2002-92289	A	20020328		

OS CASREACT 138:305790

AB The present invention relates to a production process in which tert-Bu alc. is reacted with tert-Bu hydroperoxide in the presence of a  $\beta$ -form zeolite solid acid catalyst having an SiO<sub>2</sub>/Al<sub>2</sub>O<sub>3</sub> molar ratio of from 30 to 280. By the process, di-tert-Bu peroxide can be produced with high selectivity in high yield.

RE.CNT 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 4 OF 15 CAPLUS COPYRIGHT 2005 ACS on STN

AN 2003:274771 CAPLUS

DN 138:271251

TI Preparation of dialkyl peroxides with noncorrosive zeolite catalysts

IN Namba, Seitaro; Ichikawa, Shuji; Nakamura, Tomoyuki; Matsuyama, Kazuo

PA NOF Corporation, Japan

SO Jpn. Kokai Tokkyo Koho, 5 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2003104966	A2	20030409	JP 2001-298998	20010928
	WO 2003029207	A1	20030410	WO 2002-JP9944	20020926
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
	RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF,				

CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

PRAI JP 2001-298998 A 20010928  
JP 2002-89743 A 20020327  
JP 2002-92289 A 20020328

OS CASREACT 138:271251; MARPAT 138:271251

AB Dialkyl peroxides are prepared by treatment of alcs. with organic hydroperoxides in the presence of  $\beta$ -zeolite catalysts with  $\text{SiO}_2/\text{Al}_2\text{O}_3 = 30\text{--}280$  mol. Thus, a mixture of tert-Bu hydroperoxide and  $\text{Me}_3\text{COH}$  was dropwise added to a mixture of  $\text{Me}_3\text{COH}$  and  $\beta$ -zeolite ( $\text{SiO}_2/\text{Al}_2\text{O}_3 = 100$  mol) and the reaction mixture was stirred at  $75^\circ$  for 10 h to give 81.3% di(tert-butyl) peroxide, whereas it took 20 h to obtain the product with 52.0% yield when control  $\beta$ -zeolite ( $\text{SiO}_2/\text{Al}_2\text{O}_3 = 26$ ) was used instead.

L7 ANSWER 5 OF 15 CAPLUS COPYRIGHT 2005 ACS on STN

AN 2001:822491 CAPLUS

DN 135:357700

TI Preparation of di-tert-butyl peroxide from tert-butyl hydroperoxide and **tert-butyl alcohol** under conditions of low water and catalyst content

IN Morishita, Takehiro; Koinuma, Yasuyoshi

PA Nof Corporation, Japan

SO Jpn. Kokai Tokkyo Koho, 4 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2001316358	A2	20011113	JP 2000-131186	20000428
PRAI	JP 2000-131186		20000428		

OS CASREACT 135:357700

AB  $\text{Me}_3\text{CO}_2\text{CMe}_3$  is prepared from  $\text{Me}_3\text{CO}_2\text{H}$  and  $\text{Me}_3\text{COH}$ , both of which contain 0-50,000 ppm  $\text{H}_2\text{O}$ , in the presence of sulfonic acid-type catalyst. Thus, a solution of  $\text{Me}_3\text{CO}_2\text{H}$  containing 3000 ppm  $\text{H}_2\text{O}$  was dropwise added to a mixture of  $\text{H}_2\text{SO}_4$  and  $\text{Me}_3\text{COH}$  containing 10 ppm  $\text{H}_2\text{O}$  (catalyst content 5 weight% based on  $\text{Me}_3\text{COH}$ ) at  $20^\circ$  and the reaction mixture was heated at  $80^\circ$  for 5 h to give 68.8%  $\text{Me}_3\text{CO}_2\text{CMe}_3$ .

L7 ANSWER 6 OF 15 CAPLUS COPYRIGHT 2005 ACS on STN

AN 1999:613864 CAPLUS

DN 131:215857

TI Peroxide production from alkanes and oxygen

IN Culbreth, William K., III; Taylor, Mark E.; Preston, Kyle L.; Mueller, Mark A.

PA Huntsman Specialty Chemicals Corporation, USA

SO PCT Int. Appl., 38 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9947499	A1	19990923	WO 1999-US4733	19990303
	W:				
	AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW:				
	GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
	US 6023001	A	20000208	US 1998-40817	19980318
	CA 2324159	AA	19990923	CA 1999-2324159	19990303
	AU 9928017	A1	19991011	AU 1999-28017	19990303
	EP 1064261	A1	20010103	EP 1999-908636	19990303
	EP 1064261	B1	20040915		

R: BE, DE, FR, GB, NL

JP 2002506852 T2 20020305 JP 2000-536696 19990303  
PRAI US 1998-40817 A1 19980318  
WO 1999-US4733 W 19990303

AB Peroxides (e.g., tert-Bu hydroperoxide) are prepared in high yield and selectivity from organic compds. (e.g., isobutane) and oxygen in a reaction vessel by introducing the organic compound and oxygen into the reaction vessel and by simultaneously withdrawing a first liquid product stream from adjacent the top of the reactor and a second liquid product stream from adjacent the bottom of the reaction vessel. A process flow diagram is presented.

RE.CNT 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 7 OF 15 CAPLUS COPYRIGHT 2005 ACS on STN

AN 1997:195319 CAPLUS

DN 126:171186

TI High-Pressure NMR Studies of (Porphinato)iron-Catalyzed Isobutane Oxidation Utilizing Dioxygen as the Stoichiometric Oxidant

AU Moore, Kevin T.; Horvath, Istvan T.; Therien, Michael J.

CS Department of Chemistry, University of Pennsylvania, Philadelphia, PA, 19104-6323, USA

SO Journal of the American Chemical Society (1997), 119(7), 1791-1792

CODEN: JACSAT; ISSN: 0002-7863

PB American Chemical Society

DT Journal

LA English

AB The first high pressure NMR study of any metal-catalyzed oxidation reaction is reported; this has allowed the identification of the predominant species present in solution during a (porphinato)iron [PFe] catalyzed oxidation of isobutane in which the hydrocarbon oxidizing equivalent are derived from dioxygen. These studies utilize two archetypal electron deficient PFe oxidation catalyst; one is based on the well-studied 5,10,15,20-tetrakis(pentafluorophenyl)porphyrin [(C6F5O4PG2] ligand system, while the other features the recently developed, significantly more electron poor, 5,10,15,20-tetrakis(heptafluoropropyl)porphyrin [(C3F7)4PH2] macrocycle. This work demonstrates: (i) High pressure NMR methods can provide considerable mechanistic insight into catalyst hydrocarbon oxidation reactions. (Ii) Even in a (C3F7)4PH2 ligand environment, Fe(II) is not stable under moderate O2 pressure. (Iii) (t-BuO)2 is produced in substantial quantity, consistent with a radical chain process likely dominating the observed reaction kinetics. (I.v.) That only high spin PFeIII compds. and no oxidation products are observed immediately after pressurizing the sapphire NMR tubes with PFeII catalyst, solvent, oxygen, and isobutane; this suggests that alkyl radicals may derive from a reaction of PFeIII•OH with isobutane that produces water and a PFeII complex. (V) Porphyrin decomposition occurs concomitant with the onset of catalytic isobutane oxidation, showing that simple electron deficient porphyrins cannot serve as com. isobutane oxidation catalysts which consume stoichiometric oxidants that are derived from dioxygen.

RE.CNT 38 THERE ARE 38 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 8 OF 15 CAPLUS COPYRIGHT 2005 ACS on STN

AN 1995:785887 CAPLUS

DN 123:339090

TI Improvement of the synthesis of tert-butyl hydroperoxide

AU Dorodynkh, T. N.; Musatova, A. N.; Medvedeva, Ch. B.

CS AO Kazan'orgsintez, Russia

SO Khimicheskaya Promyshlennost (Moscow) (1994), (11), 723-4

CODEN: KPRMAW; ISSN: 0023-110X

PB Khimiya

DT Journal

LA Russian

OS CASREACT 123:339090

AB (Me3C)2O2 formation in Me3COOH (I) production by treatment of Me3COH (II) with H2O2 in the presence of dil H2SO4 was reduced from 14% to 10% and the I concentration was increased from 81% to 85% by reducing the II-H2O2 ratio to

1:0.9 and doubling the time allowed for the layers to sep.

L7 ANSWER 9 OF 15 CAPLUS COPYRIGHT 2005 ACS on STN  
AN 1995:464490 CAPLUS  
DN 122:213612  
TI Preparation of dialkyl peroxides.  
IN Faraj, Mahmoud K.; Liotta, Frank J., Jr.; Kesling, Haven S., Jr.  
PA ARCO Chemical Technology, L.P., USA  
SO Eur. Pat. Appl.  
CODEN: EPXXDW  
DT Patent  
LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 638551	A1	19950215	EP 1994-305526	19940727
	R: BE, DE, FR, GB, IT, NL				
	US 5420357	A	19950530	US 1993-102017	19930804
	JP 07149715	A2	19950613	JP 1994-200282	19940803

PRAI US 1993-102017 A 19930804

OS CASREACT 122:213612; MARPAT 122:213612

AB Title compds. are prepared by a process comprising reaction of an alc. and/or an olefin with an organic hydroperoxide using a solid acidic zeolite catalyst. A debutanized isobutane oxidate (containing tert-Bu alc. and tert-Bu hydroperoxide), isobutylene, and hydrigen Y zeolite were heated to 85° for 3 h to to give a peroxide conversion of .95% an reaction selectivity to DTBP based on the peroxide 92%.

L7 ANSWER 10 OF 15 CAPLUS COPYRIGHT 2005 ACS on STN  
AN 1995:294664 CAPLUS  
DN 122:132580

TI Preparation of dialkyl peroxides via alkylation of hydroperoxides with alcohols or alkenes catalyzed by highly cross-linked hydrophobic acidic resins

IN Pourreau, Daniel B.; Kesling, Haven S., Jr.; Liotta, Frank J., Jr.; Mcfarland, Jeffrey M.

PA Arco Chemical Technology, Inc., USA

SO U.S., 4 pp.

CODEN: USXXAM

DT Patent

LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 5371298	A	19941206	US 1993-171957	19931222
	EP 659740	A1	19950628	EP 1994-309420	19941216
	R: BE, DE, ES, FR, GB, IT, NL				
	JP 07206814	A2	19950808	JP 1994-333615	19941216

PRAI US 1993-171957 A 19931222

OS CASREACT 122:132580; MARPAT 122:132580

AB The present invention provides a process the production of dialkyl peroxides by reaction of an alc. and/or an olefin with an organic hydroperoxide, using an acidic resin catalyst, especially a highly cross-linked hydrophobic acidic resin catalyst.

L7 ANSWER 11 OF 15 CAPLUS COPYRIGHT 2005 ACS on STN  
AN 1995:273032 CAPLUS  
Correction of: 1994:608028

DN 122:12522

Correction of: 121:208028

TI Integrated process for manufacture of di-tertiary-butyl peroxide

IN Liotta, Frank J., Jr.; Faraj, Mahmoud K.; Pourreau, Daniel B.; Kesling, Haven S., Jr.

PA Arco Chemical Technology, L.P., USA

SO U.S., 5 pp.

CODEN: USXXAM

DT Patent

LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 5312998	A	19940517	US 1993-75185	19930610
	JP 07048346	A2	19950221	JP 1994-133872	19940525
	EP 628546	A2	19941214	EP 1994-303917	19940531
	EP 628546	A3	19951108		
	EP 628546	B1	20000308		

R: BE, DE, FR, GB, IT, NL

PRAI US 1993-75185 A 19930610

AB In an integrated process for the manufacture of tert-Bu<sub>2</sub>O<sub>2</sub>, an isobutane oxidate containing tert-BuOH and tert-BuOOH is treated with an aqueous acidic catalyst and subjected to phase separation, the aqueous catalyst is recovered and recycled, and tert-Bu<sub>2</sub>O<sub>2</sub> is extracted from the organic phase with water.

L7 ANSWER 12 OF 15 CAPLUS COPYRIGHT 2005 ACS on STN

AN 1994:655249 CAPLUS

DN 121:255249

TI Conjoint production of ditertiary butyl peroxide and tertiary butyl alcohol from tertiary butyl hydroperoxide

IN Sanderson, John R.; Knifton, John F.

PA Texaco Chemical Co., USA

SO U.S., 5 pp.

CODEN: USXXAM

DT Patent

LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 5345009	A	19940906	US 1993-150913	19931112
	CA 2133896	AA	19950513	CA 1994-2133896	19941007
	EP 653407	A1	19950517	EP 1994-308299	19941110
	EP 653407	B1	19970910		

R: DE, FR, GB

JP 07196548 A2 19950801 JP 1994-278712 19941114

PRAI US 1993-150913 A 19931112

OS CASREACT 121:255249

AB An improved method for conjointly production of tert-Bu alc. (I) and ditertiary Bu peroxide (II) comprises: using as the hydroperoxide decomposition catalyst Pd/C and recovering I and II from the the tert-Bu hydroperoxide (III) decomposition reaction. The conversion temperature is 40-160° and pressure 0-10,000 psig. At 80° (0.5 space velocity), a 79.1% conversion of III was observed with a selectivity to I of 73.5% and selectivity to II of 21.5% vs. with a Pd/Pt on alumina, a 74.2% conversion of of III was observed with selectivity to I of 84.1% and II of 5.0%.

L7 ANSWER 13 OF 15 CAPLUS COPYRIGHT 2005 ACS on STN

AN 1994:608028 CAPLUS

DN 121:208028

TI Integrated process for manufacture of di-tertiary-butyl peroxide

IN Liotta, Frank J., Jr.; Kesling, Haven S., Jr.; Pourreau, Daniel B.

PA Arco Chemical Technology, L.P., USA

SO U.S., 5 pp

CODEN: USXXAM

DT Patent

LA English

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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PI	US 5312998 A		19940517	US 1993-75185	19930610
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AB In an integrated process for the manufacture of di-tert-Bu<sub>2</sub>O<sub>2</sub>, an isobutane oxidate containing tert-BuOH and tert-BuOOH is reacted in the presence of an aqueous acidic catalyst and subjected to phase separation, the aqueous catalyst is recovered and recycled, and tert-Bu<sub>2</sub>O<sub>2</sub> is extracted from the organic phase with water.

L7 ANSWER 14 OF 15 CAPLUS COPYRIGHT 2005 ACS on STN

AN 1994:269652 CAPLUS

DN 120:269652

TI Preparation of dialkyl peroxides  
IN Faraj, Mahmoud K.  
PA ARCO Chemical Technology, L.P., USA  
SO U.S., 4 pp.  
CODEN: USXXAM  
DT Patent  
LA English  
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 5288919	A	19940222	US 1993-61139	19930513
PRAI	US 1993-61139		19930513		

OS CASREACT 120:269652; MARPAT 120:269652

AB A process for preparation of ROOR1 (R, R1 = C1-10 alkyl) comprises reacting ROH and/or (R2)2C:C(R3) (R2, R3 = H, R) on liquid phase with R1OOH at 20-150° and at a pressure sufficient to maintain the liquid phase in presence an inorg. heteropoly or isopoly acid catalyst. A debutanized isobutane oxidate containing 58 weight% Me3COH, 40 weight% Me3COOH and the remainder other organic materials was combined with H3PW12O40 and heated to 80° under N. After 6 h, Me3COOH conversion was 82%, Me3COH was 68% and the reaction selectivity to DPTB based on Me3COOH converted was 90%.

L7 ANSWER 15 OF 15 CAPLUS COPYRIGHT 2005 ACS on STN  
AN 1989:441811 CAPLUS  
DN 111:41811

TI Recovery of di-tertiary butyl peroxide from a tertiary butanol azeotrope  
IN Sanderson, John R.; Meyer, Robert A.; Smith, William A.; Marquis, Edward T.  
PA Texaco Inc., USA  
SO U.S., 8 pp.  
CODEN: USXXAM

DT Patent  
LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 4810809	A	19890307	US 1986-945629	19861223
PRAI	US 1986-945629		19861223		

AB Di-tert-Bu peroxide (I), useful as a high-temperature radical initiator, is recovered by distilling an isobutane peroxidn. product to obtain an overlead fraction (containing substantially all of the I-tert-BuOH azeotrope and other contaminants) and countercurrently extracting the azeotrope with ethylene glycol. Extraction of a 10.3:20.0 g I-tert-BuOH mixture with 30.0 g ethylene glycol resulted in an upper layer containing I 73.31, tert-BuOH 22.08, and ethylene glycol 3.36%, and a lower layer containing I 19.92, tert-BuOH 48.35, and ethylene glycol 31.50%.